

**IN THE SPECIFICATION:**

The specification as amended below with replacement paragraphs shows added text with underlining and deleted text with ~~strike through~~.

Please AMEND the paragraph beginning at page 5, line 22, as follows:

The subsidiary power supply circuit 4 comprises: a series circuit ~~composed of~~ comprising a subsidiary power source 41, a switching element 42 and a resistor 43; a parallel circuit composed of a current reducing resistor 44 and a capacitor 45; and a back flow prevention diode 46, which are connected in series.

Please AMEND the paragraph beginning at page 6, line 9, as follows:

First, the controller 5 turns on the switching element 42 of the subsidiary power supply circuit 4. A voltage VS of the subsidiary power source 41 is applied between the workpiece 1 and the electrode 2 through the switching element 42, the resistor 43, the parallel circuit composed of the current reducing resistor 44 and the capacitor 45, and the back flow prevention diode 46, as shown FIG. 2a. A leakage current between the ~~electrodes~~ electrode 2 and the workpiece 1, as a second electrode, by the application of the voltage VS from the subsidiary power source 41 is reduced to an adequately small level by the current reducing resistor 44. Thus, the electric corrosion of the workpiece 1 and the adhesion of material of the electrode to the surface of the workpiece are suppressed.

Please AMEND the paragraph beginning at page 6, line 19, as follows:

After the application of the preliminary voltage, an electric discharge is generated and the controller 5 detects the generation of the electric discharge and turns on the switching element 32 of the main power supply circuit 3. The voltage VM of the main power source 31 is ~~supplied~~ applied between the electrodes through the switching element 32 and the back flow prevention diode 33 to flow a machining current I of large amount.

Please AMEND the paragraph spanning pages 6-7, as follows:

There is a time delay from the generation of the electric discharge till the main current from the main power source 31 substantially rises and in this delay time a sufficiently large

current is flown through the capacitor 45 since the voltage between the electrodes suddenly decreases in response to the generation of the electric discharge, as shown in FIG. 2b. As a result, the electric discharge is securely maintained not to drop to "0" in the delay time by the current supplied through the capacitor 45 even if the electric discharge current fluctuates in the delay time by the oscillation of the inductance and the floating capacitance between the electrodes. This effect is available even if the electric discharge is generated immediately after the application of the voltage from the subsidiary power source 41. This is because a potential difference is made at conductors of the capacitor 45 in the state where the electric discharge is to occur between the electrodes, so that a charging current flows to the capacitor 45 sufficiently to maintain the electric discharge during the period of delay. Thus, the electric discharge is maintained in the delay time to secure a rise of the machining current  $I$  from the main power supply circuit 3 ~~to be flown~~ which is to flow between the workpiece 1 and the electrode 2.

Please AMEND the paragraph beginning at page 7, line 13, as follows:

In this embodiment, the resistor 43 of an appropriate value is ~~provided as being~~ inserted between the parallel circuit ~~composed~~ of the current reducing resistor 44 and the capacitor 45, and the switching element 42, so as to prevent a phenomenon of superimposing of the vibration, or oscillation, of ~~on~~ the voltage between the electrodes due to capacitance of the capacitor 45 and inductance of power cables ~~and between the electrodes when a start of~~ starting the application of the voltage between the electrodes. Thus, the resistor 43 is provided for preventing the vibration of the voltage between the electrodes.

Please AMEND the paragraph spanning pages 7-8, as follows:

Both of the back flow prevention diodes 33 and 46 may not necessarily be provided and only one of the diodes associated with one of the main power source 31 and the subsidiary power source 41, which has a lower voltage level than the other, may be provided to prevent a back flow into the power source which has the lower voltage. In this embodiment, both the back flow prevention diodes 33 and 46 are provided for the main power source 31 and the subsidiary power source 41, respectively, to cope with a case where the voltage level  $V_M$  of the main power source 31 and the voltage level  $V_S$  of the subsidiary power source 41 are reversed in dependence on a rough machining and a finish machining to be performed.